

Appl. No. 10/686,474
Reply to Office Action of December 16, 2005

Docket No. MOIS-014AUS

Amendments to the Specification:

Please replace paragraph 0051 beginning on page 11, line 8 with the following amended paragraph.

[0051] The circuit 300 includes a single potentiometer P1, a scaling resistor RSC, and the load terminals (including the second input terminal WHT) coupled end-to-end, as shown. The potentiometer P1 provides a voltage that biases respective control switching elements Q31, Q32 to a conductive state if the load voltage increases above a predetermined amount determined by the setting of the potentiometer. The control switching elements Q31, Q32, when conductive, turn off the respective Darlington pairs Q12, Q22, and Q21, ~~[[Q31]]~~ Q11 to provide selected periods of non-conduction.

Please replace paragraph 0052 on page 11 with the following amended paragraph.

[0052] In one particular embodiment, such as that shown in FIG. 10, the scaling resistor RSC is in the order of about 1 M Ω so as to maintain current to a level within applicable safety standards, such as UL (Underwriters Laboratories). Further exemplary circuit component characteristic values are shown. It is understood that for this, and any other embodiment herein, that component values are merely illustrative and can be readily varied by one of ordinary skill in the art. It is understood that this particular arrangement is useful, for example, in the case where one of the terminals, e.g., the white wire, is not readily accessible.

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Please replace paragraph 0053 beginning on page 12 with the following amended paragraph.

[0053] FIG. 10 shows a further exemplary embodiment 400 similar to that shown in FIG. 9 where circuit is referenced to ground. It is understood that the potential difference between the white wire terminal WHT and GND is relatively small since the difference corresponds to the amount of current flow through the scaling resistor RSC. For example, $120\text{V}/1\text{M}\Omega = 120\mu\text{A}$, which is well within applicable UL safety standards for ground fault current.

Please replace paragraph 0056 beginning on page 13 with the following amended paragraph.

[0056] When the voltage across the sense resistor RF increases above a predetermined level, the potential at the gate G of the triac ~~[[bias]]~~ biases the triac to the conductive state so as to turn the first and second switching elements Q1, Q2 off until the next zero crossing. The energy stored in the sense capacitor CF can maintain the triac in the conductive state to provide duty cycle control. That is, the circuit can remain off for a number of AC cycles. This circuit can be considered to be a self-resetting electronic fuse.